CLAIMS

1. Device (21) for placing a vascular implant (10) including the following:

- a vessel dilation device (1) with an outer envelope (2) and a tapered end piece for introduction into a vessel, whereby said end piece consists of a nose (14) formed at the distal extremity of the outer envelope (2) and the dilation device (1) comprises means for opening the nose (14), consisting of at least two longitudinal slots (16a, 16b, 16c, 16d) which divide the nose (14) into several segments (15a, 15b, 15c, 15d) which can be opened out in order to open the nose (14);

- an implant (10) which is placed in the outer envelope (2);

characterised in that:

- the implant (10) includes an expandable element (24) which presses against the internal wall of the outer envelope (2);

- it is provided with means for the translation of said implant (10) in relation to the outer envelope (2) such that the expandable element (24) can press against the internal wall of the nose (14) in order to open out the segments (15a, 15b, 15c, 15d).

2. Device according to Claim 1 characterised in that:

- the means of translation include an inner sheath (3) mounted so as to slide in the outer envelope (2) and push the expandable element (24).

3. Device according to Claim 2 characterised in that:

- the implant (10) includes a second, hollow expandable element (25) and a hollow intermediate section (26) that is deformable by twisting;

- the second expandable element (25) presses against the internal wall of the inner sheath (3);

- the inner sheath (3) is mounted so as to slide and rotate in the outer envelope (2).

4. Device (1) according to Claim 2 or 3 characterised in that:

- it includes a grip (6) that is an integral part of the outer envelope (2).

5. Device (1) according to Claims 2 to 4 characterised in that:

- it includes a grip (7) that is an integral part of the inner sheath (3).

6. Device (1) according to Claim 5 in combination with Claim 4 characterised in that:

- the grip (7) on the inner sheath is located behind the grip (6) on the outer envelope (2) and includes a removable spacer (8) situated between said grips (6, 7) to maintain the space between them.

7. Device (1) according to any of the Claims 1 to 6 characterised in that:

- the segments that can be deployed (15a, 15b, 15c, 15d) are joined as required along the slots (16a, 16b, 16c, 16d) when the nose (14) is closed.

8. Device (1) according to Claims 7 characterised in that:

- it includes a temporary connector (17) by slot (16a, 16b, 16c, 16d) between the segments (15a, 15b, 15c, 15d).

9. Device (1) according to any of the Claims 1 to 8 characterised in that:

- the nose (14) includes a central residual passage (18).

10. Device (1) according to any of the Claims 1 to 9 characterised in that:

- the nose (14) includes a shape memory so that its default position is closed when the means of opening are inactive.

11. Device (1) according to Claim 3 characterised in that:

- it includes a plunger (4) mounted in such a way as to slide in the inner sheath (3) and can press against the free end of the second expandable element;

12. Device (1) according to Claim 11 characterised in that:

- it includes a grip (12) that is an integral part of the plunger (4) located behind the grip (7) that is an integral part of the inner sheath (3) and it also includes a removable spacer (9) placed between said grips (7, 12) to maintain them apart.

13. Device (1) according to Claim 3 characterised in that:

- it includes means of adjusting (19, 20) the angle of the inner sheath (3).

14. Device (1) according to any of the Claims 1 to 13 characterised in that:

- it includes a central channel (27) along the line of the outer envelope (2) to allow a guide wire to be passed through.